

[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0722; Product Identifier 2017-SW-104-AD

RIN 2120-AA64

Airworthiness Directives; Bell Helicopter Textron Canada Limited Helicopters

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to supersede airworthiness directive (AD) 2015-22-02 for Bell Helicopter Textron Canada Limited (Bell) Model 429 helicopters. AD 2015-22-02 requires inspecting the tail rotor (TR) pitch link assemblies. This proposed AD would retain the inspections of AD 2015-22-02 and would require replacing certain pitch link bearings. Since we issued AD 2015-22-02, Bell has introduced a new design bearing. The actions of this proposed AD are intended to prevent an unsafe condition on these products.

DATES: We must receive comments on this proposed AD by [INSERT DATE 60 days AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- <u>Federal eRulemaking Docket</u>: Go to http://www.regulations.gov. Follow the online instructions for sending your comments electronically.
 - Fax: 202-493-2251.

- <u>Mail:</u> Send comments to the U.S. Department of Transportation, Docket
 Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey
 Avenue SE, Washington, DC 20590-0001.
- <u>Hand Delivery:</u> Deliver to the "Mail" address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2018-0722; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the Transport Canada AD, the economic evaluation, any comments received, and other information. The street address for Docket Operations (telephone 800- 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this final rule, contact Bell Helicopter

Textron Canada Limited, 12,800 Rue de l'Avenir, Mirabel, Quebec J7J1R4; telephone

(450) 437-2862 or (800) 363-8023; fax (450) 433-0272; or at

http://www.bellcustomer.com/files/. You may review the referenced service information

at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy,

Room 6N-321, Fort Worth, TX 76177.

FOR FURTHER INFORMATION CONTACT: David Hatfield, Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5110; email david.hatfield@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that might result from adopting the proposals in this document. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit only one time.

We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. Before acting on this proposal, we will consider all comments we receive on or before the closing date for comments. We will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. We may change this proposal in light of the comments we receive.

Discussion

We issued AD 2015-22-02, Amendment 39-18306 (80 FR 65618, October 27, 2015) (AD 2015-22-02), for Bell Model 429 helicopters with a TR pitch link assembly part number (P/N) 429-112-101 or 429-112-103 installed. AD 2015-22-02 requires repetitively inspecting each inboard and outboard TR pitch link assembly for axial or radial bearing play every 50 hours time-in-service (TIS), performing a dimensional inspection of the TR pitch link if there is axial or radial bearing play, and replacing the

TR pitch link before further flight if there is any wear beyond allowable limits. AD 2015-22-02 was prompted by Emergency AD No. CF-2015-16, dated July 2, 2015, and Emergency AD No. CF-2015-16R1, dated August 6, 2015, issued by Transport Canada, to correct an unsafe condition for Bell Model 429 helicopters. Transport Canada advised of several occasions where the TR pitch link spherical bearings experienced early and accelerated wear.

Actions Since AD 2015-22-02 Was Issued

Since we issued AD 2015-22-02, Transport Canada has issued AD No. CF-2015-16R2, dated April 17, 2017, which supersedes AD CF-2015-16R1. According to Transport Canada, Bell has reported that the TR pitch link assembly can be rotated during the 50-hour inspections to extend the serviceability life of the bearings. Transport Canada AD No. CF-2015-16R2 requires modified inspection procedures for the spherical bearings and requires replacing the TR pitch link bearings (or the TR pitch link assembly) with spherical bearings manufactured after January 12, 2015. Transport Canada AD No. CF-2015-16R2 also requires re-identifying TR pitch link assemblies with a different P/N after installing the new bearings. We propose to issue this AD to make similar changes.

FAA's Determination

These helicopters have been approved by the aviation authority of Canada and are approved for operation in the United States. Pursuant to our bilateral agreement with Canada, Transport Canada, its technical representative, has notified us of the unsafe condition described in the Transport Canada AD. We are proposing this AD because we evaluated all information provided by Transport Canada and determined the unsafe condition exists and is likely to exist or develop on other products of the same type

design.

Related Service Information

Bell has issued Alert Service Bulletin No. 429-15-16, Revision B, dated June 15, 2016. This service information contains procedures for repetitively inspecting the TR pitch link assembly until it is upgraded by replacing the TR pitch link bearings.

AD Requirements

This proposed AD would require performing a dimensional inspection of the spherical bearings for axial and radial play and inspecting the TR pitch link assembly sealant for pin holes, voids, and excessive thickness. These inspections would be required within 50 hours TIS and thereafter at intervals not exceeding 50 hours TIS.

This proposed AD would also require replacing any spherical bearing manufactured before January 13, 2015, that has exceeded 250 hours TIS or that has an unknown number of hours TIS, and re-identifying the P/N of the TR pitch link assembly.

Differences Between this Proposed AD and the Transport Canada AD

The Transport Canada AD requires the bearing inspection within 10 hours TIS or before exceeding 60 hours TIS since new, whichever occurs later. This proposed AD would require the bearing inspection within 50 hours TIS. The Transport Canada AD also requires replacing certain bearings within 200 hours TIS after the initial bearing inspection or within 250 hours TIS since new, whichever occurs first. This proposed AD would require replacing the bearing within 200 hours of the initial inspection or at the next 50 hour TIS inspection if the hours TIS of a pitch link assembly exceed 250 hours TIS or are unknown.

Interim Action

We consider this proposed AD to be an interim action. If final action is later identified, we might consider further rulemaking then.

Costs of Compliance

We estimate that this proposed AD would affect 85 helicopters of U.S. Registry. We estimate that operators may incur the following costs in order to comply with this proposed AD. At an average labor rate of \$85 per hour, inspecting the TR pitch link assemblies would require 2 work-hours for a cost of \$170 per helicopter and \$14,450 for the U.S. fleet per inspection cycle. Replacing both spherical bearings in each TR pitch link assembly would require 3 work-hours, and required parts would cost \$3,088, for a cost of \$3,343 per helicopter and \$284,155 for the U.S. fleet.

According to Bell's service information some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage by Bell. Accordingly, we have included all costs in our cost estimate.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD will not have federalism implications under Executive Order 13132. This proposed AD will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify that this proposed regulation:

- 1. Is not a "significant regulatory action" under Executive Order 12866;
- 2. Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
- 3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
- 4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2015-22-02, Amendment 39-18306 (80 FR 65618, October 27, 2015), and adding the following new AD:

Bell Helicopter Textron Canada Limited: Docket No. FAA-2018-0722; Product Identifier 2017-SW-104-AD.

(a) Applicability

This AD applies to Model 429 helicopters with a pitch link assembly part number (P/N) 429-012-112-101, 429-012-112-103, 429-012-112-101FM, or 429-012-112-103FM installed, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as a worn pitch link. This condition, if not corrected, could result in pitch link failure and subsequent loss of control of the helicopter.

(c) Affected ADs

This AD replaces AD 2015-22-02, Amendment 39-18306 (80 FR 65618, October 27, 2015).

(d) Comments Due Date

We must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(e) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(f) Required Actions

- (1) Within 50 hours time-in-service (TIS) and thereafter at intervals not to exceed 50 hours TIS:
- (i) Perform a dimensional inspection of each inboard and outboard pitch link assembly for axial and radial bearing play. With a 10X or higher power magnifying glass, inspect the bearing liner for a crack, deterioration of the liner, and extrusion of the liner from the plane. If there is axial or radial play that exceeds allowable limits, or if there is a crack, deterioration of the liner, or extrusion of the liner, before further flight, replace the bearing.
- (ii) Inspect the pitch link assembly sealant for pin holes and voids and to determine if the sealant thickness is 0.025 inch (0.64 mm) or less, extends over the roll staked lip by 0.030 inch (0.76 mm) or more, and is clear of the bearing ball. If there is a

pin hole or void, or if the sealant exceeds 0.026 inch (0.66 mm), does not extend over the roll staked lip by 0.030 inch (0.76 mm) or more, or is not clear of the bearing ball, before further flight, replace the bearing.

- (2) For pitch link assembly part number (P/N) 429-012-112-101, 429-012-112-103, 429-012-112-101FM, and 429-012-112-103FM, within 200 hours TIS following the initial inspection required by paragraph (f)(1) of this AD, or if the hours TIS of a pitch link assembly exceed 250 hours TIS or are unknown, at the next 50 hour TIS inspection required by paragraph (f)(1) of this AD:
- (i) Replace each bearing P/N 429-312-107-103 with a date of manufacture before January 13, 2015, with a bearing P/N 429-312-107-103 that was manufactured on or after January 13, 2015.
- (ii) Using a white permanent fine point marker or equivalent, re-identify the pitch link assembly:
- (A) Re-identify P/N 429-012-112-101 and 429-012-112-101FM as 429-012-112-111FM.
- (B) Re-identify P/N 429-012-112-103 and 429-012-112-103FM as 429-012-112-113FM.
- (iii) Apply a coating of DEVCON 2-TON (C-298) or equivalent over the new P/N.

(g) Special Flight Permits

Special flight permits are prohibited.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Section, Rotorcraft Standards Branch,

FAA, may approve AMOCs for this AD. Send your proposal to: David Hatfield, Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5110; email 9-ASW-FTW-AMOC-Requests@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

(i) Additional Information

- (1) Bell Alert Service Bulletin No. 429-15-16, Revision B, dated June 15, 2016, which is not incorporated by reference, contains additional information about the subject of this AD. For service information identified in this AD, contact Bell Helicopter Textron Canada Limited, 12,800 Rue de l'Avenir, Mirabel, Quebec J7J1R4; telephone (450) 437-2862 or (800) 363-8023; fax (450) 433-0272; or at http://www.bellcustomer.com/files/. You may review a copy of the service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177.
- (2) The subject of this AD is addressed in Transport Canada AD No. CF-2015-16R2, dated April 17, 2017. You may view the Transport Canada AD on the Internet at http://www.regulations.gov in the AD Docket.

(j) Subject

Joint Aircraft Service Component (JASC) Code: 6720 Tail Rotor Control System.

Issued in Fort Worth, Texas, on July 23, 2018.

Scott A. Horn,

Deputy Director for Regulatory Operations, Compliance & Airworthiness Division, Aircraft Certification Service. [FR Doc. 2018-16637 Filed: 8/7/2018 8:45 am; Publication Date: 8/8/2018]